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Benefits Realisation in Acute Hospitals in England – A Strategic Management Perspective

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Benefits Realisation in Acute Hospitals in England – A Strategic Management Perspective

Abstract

Purpose of article

Benefits realisation (BR) is also a term that is applied within the both the private and public sector to try to ensure that IT projects deliver a number of benefits to stakeholders as well as a return on investment. The English NHS views BR as an essential part of their IT enabled transformation programme but whether it is a core organisational capability is not understood. The purpose of this article is to explore whether NHS directors believe a benefits realisation approach to IT investment is a strategic organisational capability within the acute hospital sector.

Methodology

A survey of the 164 English NHS acute hospitals was carried out in summer 2013. The questionnaire was sent out to all directors of finance, nursing and IT. The questionnaire was based on research conducted by Ashurst and Hodges (2010) and using descriptive statistics to provide an NHS context.

Findings

Responses were received from 54 per cent of the targeted hospitals and the results indicate that development of the business case remains the place for identification of system benefits although the intended recipients of those benefits are changing from management to patients. Training for benefits realisation is an issue and many hospitals do not appear to have a process in place for developing staff competencies in this area.

Implications

This research has never been undertaken before within the context of the NHS and would suggest that if benefits realisation is to be useful in delivering successful IT projects then much more needs to be done in developing staff across the hospitals and viewing BR as a core organisational capability. The research conducted here has the potential to impact upon evidence based practice in the use of benefits realisation.

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Benefits Realisation in Acute Hospitals in England – A Strategic Management Perspective

1. Introduction

Over the last thirty years successive UK governments have tried through their Information Management and Technology (IM&T) strategies to develop integrated information systems across the National Health Service (NHS) as well as introduce other ICT innovations. Major initiatives have included the Hospital Information Support Systems (HISS) pilots of the early 1990s and more recently the National Programme for IT (NPfIT) of the 2000s. Unfortunately the track record of the organisations tasked with implementing the new systems has been mixed (Hughes, 2003; Wilson and Howcroft, 2005; Greenhalgh et al., 2010; Sheikh et al., 2010). The HISS pilot initiatives were deemed to be a waste of money by the National Audit Office (NAO, 1996) as £100m was spent with £3m delivered benefits. NPfIT has not fared much better and in 2013 the NAO stated:

"There is…very considerable uncertainty around whether the forecast benefits will be realised…Overall, around two-thirds of the total estimated benefits are future benefits that have yet to be realised….. For a number of programmes, 98 per cent of estimated benefits are yet to be realised." (National Audit Office, 2013)

During the HISS and NPfIT period a key concept was introduced into the NHS, '*benefits realisation*', which was intended to support the delivery of successful IT projects. Although the definition of benefits realisation has changed over time the original intention was: '*Benefits of information systems must be identified and their realisation must be planned and monitored'* (IMG, 1992). Currently the process for benefits realisation is governed by a number of guidelines: most recently the Benefits Eligibility Framework published in 2010 based on the HM Treasury's Greenbook (a cost-benefit analysis technique) and the Benefits Informatics zone which is a repository for benefits data set up in 2009 (Health and Social Care Information Centre 2014). However, the more established process in use is the Managing Successful Programmes (MSP) guidelines and Projects in Controlled Environments (PRINCE2) management system (Cabinet Office 2011). Despite a relatively substantial but immature body of IS literature on benefits realisation and the Department of Health's commitment to this approach there is little evidence to suggest that studies proposing such methods have been implemented successfully if at all or whether NHS organisations are developing their stakeholders to identify and manage the process (Doherty, Ashurst, & Peppard, 2012; Ashurst and Hodges, 2010). Further complexity around benefits realisation and ICT is the new IM&T strategy (DoH, 2012) which no longer champions national systems integration but suggests that individual hospitals should develop their own ICT with the patient at the heart of the policy. Government will not provide the IT resources and hospitals are expected to find the money to develop these from within their budgets. The implications for this are massive bearing in mind the increasing cost of healthcare and the reduction in public sector finance since 2010.

Ashurst and Hodges (2010) have argued that organisations which view BR as a core dynamic capability will be more successful in delivering IT enabled change and this capability should be integrated across a wide range of organisational functions.

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This paper aims to provide insight into the position of benefits realisation (BR) in English NHS acute hospitals in order to better understand their potential for delivering the new IM&T strategy and the organisational transformation needed to meet patients' expectations. This is achieved through a survey of NHS strategic managers within acute hospitals in England. The survey was carried out between April and July 2013. Although the paper has been based on a sound literature base it is not our intention to examine it here to any great extent as the focus is to present our empirical data. However some theory is integrated into the work where it is appropriate. The next section provides a brief discussion of BR from an information systems perspective and then gives a contextual overview of IM&T within the NHS and considers the potential impact of the new IM&T strategy for acute hospitals before presenting the empirical results of our survey. Finally we provide a discussion of these results and consider how the research will evolve.

2. Defining Benefits Realisation

Benefits realisation has been described in a number of ways but the most popular definition is one suggested by Ward et al. (1996: 214) *'the process of organization and managing such that the potential benefits arising from the use of IS/IT are actually realized'*. The concept of 'benefits realisation' (BR) appears to have emerged from the IS literature on evaluation. Yet although well over one thousand articles, books, conference papers and theses have been written on the subject of IS evaluation, only a small sub-set of this literature has been concerned with core issues of what precisely is meant by the terms 'value' and 'benefit' and with the process of making (specifically) IS investment decisions. Realising the benefits of implementing these systems has remained equally elusive (Bannister and Remenyi, 2000).

There is little doubt that IS benefits evaluation is problematical (Smithson and Hirscheim, 1988) and has been for some time (Farbey et al., 1995; Remenyi and Money,1994, Remenyi et al., 1995, Remenyi, 1999; Willcocks and Lester, 1993). One argument suggested by Farbey et al., (1994) is that evaluation is difficult for stakeholders in organisations because IS investments are sometimes bound up within complex technical and social structures and often it is impossible to extricate them to accurately estimate both costs and benefits.

Nevertheless the predominant paradigm for benefits realisation still remains the functionalist, rational model dominant in the project management community e.g. linear thinking, quantification, cause and effect, reductionism, control and a split between thinking and doing (Pellegrinelli 2011). Popularised by the Association for Project Management (APM), from a practice perspective this approach offers managers an appealing standardised methodology to realise their investment outcomes and the associated benefits (Breese 2012). The apparent success of return on investment as an evaluation technique for non-IS projects has led to a propensity for organisations to identify a similar 'one best way' approach (Farbey et al., 1993). There have been attempts to develop more contemporary theory around benefits realisation but this has tended to incorporate other literatures to deliver a more explicit business benefits orientation (e.g. Doherty et al., 2012; Ashurst et al., 2008 and Remenyi and Sherwood-Smith 1998). This has resulted in a focus on other areas such as skills and competence of individuals to facilitate the delivery of benefits and to embed them in the organisation (Ashurst and Hodges, 2010).

Farbey et al., (1994) argue that it is important to search for benefits and costs because the amount of money involved is often substantial and implementation of systems may be central to the successful performance of the organisation. In spite of this many business cases are

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written to justify new technology and identify low-level benefits e.g. saving on headcount, saving time. However, modern ICT can be capable of much more than this and has the potential to make the world a better place (Walsham 2012). Yet benefits cannot accrue by themselves. Organisations need to be aware of the nature of benefits that might be accrued during the life time of the system, how to recognise them and to be able to develop their staff to support the delivery of those benefits. The next section deals with the primary research that was carried out to investigate the status of benefits realisation within the strategic consciousness of senior management in acute hospitals in England and to explore some of the basic concepts around the topic.

3. Benefits realisation and the NHS

From the mid- 1980s until 2010 various UK governments of the day have tried to improve the efficiency and effectiveness of the public sector through the implementation of large scale information technology integration systems. Although well-intentioned and ambitious many of these projects have been disasters (King and Crewe, 2013). Likewise within the context of the NHS IM&T strategies over this period have aspired to integrate complex IM&T across the UK (Waring and Wainwright, 2000, Eason, 2007, Clegg and Shepherd, 2007, Peltu et al., 2008, Currie, 2012). The current IS strategy for the NHS sets out the government's vision for greater autonomy and locally led development of IS within Trusts (Department of Health 2011). Prior to this change top-down government directives with a one-size-fits-all approach had attempted to standardise complexities of the multifaceted NHS. Whilst the NHS is generally thought of as a single organisation it is more like a federation of smaller enterprises (Peltu, Eason et al. 2008) with 'differences in size, structure, culture, clinical services, patient population, IT capabilities and management roles' (Currie 2012, p.241). Trusts face rising hospital admissions, an ageing population, obesity epidemic and an increasing number of patients with complex, chronic and multiple illnesses. Alongside these health challenges trusts are expected to adapt to organisational changes introduced by the new Health and Social Care Act 2012 as well as continue to exploit the latest technologies, drugs and innovations. In addition to these major developments there is the requirement to manage significant and unprecedented reductions (or 'efficiencies') to budgets and staffing numbers (Royal College of Physicians 2012).

The austerity measures introduced by the Conservative government (2010-15) have made it essential that any NHS IT investment must demonstrate benefits in patient care and in efficiency gains. These benefits must be evidence-based and monitored over time. To date this has not been done and it is unclear how it will be done in the future. Ashurst and Hodges (2010) have argued that BR is a dynamic capability of an organisation and as such should be embedded in multi and cross-functional teams. In the NHS BR has been the domain of IT staff and as such has been part of their remit when systems have been implemented. If acute hospitals are to utilise the BR approach to IT enabled transformation and change then they must ensure that this capability is developed in the wider organisation beyond the IT function.

4. Methodology

Assessment of the academic literature relating to the concepts of IS evaluation, benefits realisation and how organisations develop the associated capabilities of benefits realisation has informed the content of the survey instrument developed for this study. As Eisenhardt and Martin (2000:1107) indicate "*Dynamic capabilities are the antecedent organizational*

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and strategic routines by which managers alter their resource base … to create new value-creating strategies… They are the drivers behind the creation, evolution and recombination of other resources into new sources of competitive advantage". Additionally, Ashurst and Hodges (2010) contend that a benefits realisation assessment of technology enabled change represents a dynamic capability to be nurtured in environments such as the public sector where resources are deployed to deliver strategic change to the organisation.

The intention of the study is to gauge the extent to which the various participating NHS Trusts place importance on benefits realisation, whether developments have been initiated to support benefits realisation and if the approach is becoming embedded in organisational practice. 492 questionnaires were sent to three distinct groups of senior staff in each NHS Acute Trust in England:

- Directors of Nursing (or comparable role)
- Directors of Finance
- Directors of IT (or comparable role)

The involvement of employees holding these positions is based on the assumption that they are located in the associated organisational hierarchies close to, or at, board level committee, and as such, contribute to strategic decision-making within their Trust. The survey instrument, as shown in Appendix 1, evaluates both perceptions and collects factual information.

The questionnaire, based upon a five point Likert scale, was piloted during April 2013 with amendments made accordingly. A neutral option, '*neither agree or disagree'* was included because managers at a high level of an organisation may not have an answer at hand. The most important aspect of the structure of the questionnaire was in how it related to the literature and the research team did not explore whether certain types of questions may lead to people choosing and sticking with one column. The initial draft questionnaire was scrutinised by the research team and then it was sent out to a local acute trust hospital to be completed by three directors. We asked the directors for their comments on the ease of completion of the survey in terms of terminology, language, length etc. Based on their feedback some changes were made to its length and use of terminology.

The survey in paper format was then disseminated through the post to the three individual groups of senior managers listed above staff over a period of three months from May to July 2013, with responses received up to September 2013. We chose different coloured paper for each category of director to make it visually more noticeable when it arrived on a Trust desk. The questionnaire to Directors of Nursing was despatched in May, with a June delivery to the Finance Directors and a July despatch for the IT Directors. The rationale for this staggered delivery was to ensure Directors within an individual Trust did not have the opportunity to collaborate on their survey responses. In the small number of cases where multiple responses were generated from an individual Trust, comparison with the two-set or three-set responses was made to determine whether the data represented a group of individual responses or represented a multiple submission of the same response, thus representing a collective rather than individual perspective. The decision was taken, should the latter arise, to eliminate the "*collective*" survey responses from the subsequent analysis.

The survey data were transcribed into SPSS by an experienced statistician (one of the authors) and validated by another of the authors. Then the data were analysed using version

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twenty of SPSS. The results presented here represent key descriptive statistical analysis and the outcomes of the first stage of the research into benefits realisation. It is the intention to investigate benefits realisation in greater depth by means of interviews based on the key findings of this study, and by doing so, assess where Trusts are developing the dynamic capabilities with regard to benefits realisation.

The analysis presented comprises appropriate graphical display of the scale-question responses, together with tabular presentation and percentage frequency distributions. There is some limited significance testing presented to highlight differences or associations to question response by senior manager role, significance being reported at the 5% or 1% levels typical to business and management research. The areas for consideration cover assessment of how benefits realisation plays a role in successful delivery of new IT, staff development and training to support successful IT outcomes and Trust philosophy on staff development in relation to IT and change projects. The research presented here is guided by the University's Ethics policies. There here is no identification within this paper of any individual or NHS Trust, with the resultant survey data stored securely and with no reference to the study participants.

5. Findings and Analysis

This section is structure around the components of the questionnaire and the statistical analysis is shown in the various tables presented.

5.1. Participant Overview – Role, Response by Trust and Project Experience

The response to the survey comprises 108 returned questionnaires, which apart from two responses, were fully complete. As shown in Figure 1 there was one hospital where all three questionnaires were returned. For a further 19 hospitals, two questionnaires were returned, 7 involving Directors of Nursing and IT, 4 Directors of Nursing and Finance and 8 involving Directors of Finance and IT. An additional 67 hospitals returned one questionnaire. This provides a total representation in the study for 87 hospitals being represented in this study, accounting for 54% of those targeted across England's acute hospital provision.

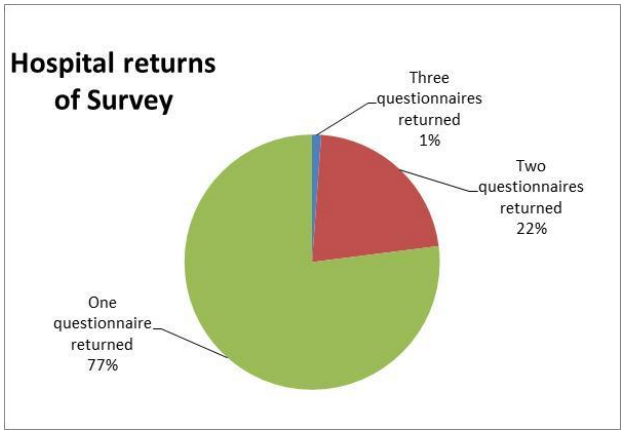

Figure 1: Percentage return of Survey Instrument

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No questionnaires were removed from the subsequent analysis based on collective rather than individual completion involving respondents from the same Trust. Overall, 30% of the participants led the Finance function, 34% IT and 36% were Directors of Nursing.

In terms of variety of systems implementation experience, 73% have experience working on projects relating to patient administration systems (PAS), 68% with nurse rostering systems, 64% with order communication systems and 62% with bed management systems. Moreover, 49% of these senior participants indicated hands-on experience with at least one "*other*" systems project beyond those cited above. Overall, 48% of the study participants have experience of four or more different project types. This experience level displayed no significant difference by role category, only 'order communication systems' experience being role associated at the 5% significance level indicating IT Directors being more likely to have worked in this area. Interestingly, 8% of the IT Directors participating in the study failed to indicate that they had any experience of working with the key systems presented here, compared with 8% of the Nursing Directors and 1% of the Finance Directors. A senior IT manager made specific reference to the "*National Programme for IT*" to explain the lack of opportunities in developing any of these named initiatives.

5.2. Assessment of how benefits realisation plays a role in successful delivery of new IT

A number of measures were considered in this component of the study, percentage frequency distributions corresponding to each are presented in Table 1.

Statement	Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)	Mean
Our Trust/hospital is keen to adopt IT systems to support the management of resources	69%	29%	2%	0%	0%	1.33
New IT systems cannot be purchased without making a business case	69%	27%	1%	3%	0%	1.37
I have been involved in the adoption of a new IT system	72%	24%	3%	1%	0%	1.32
When a business case is made for a new IT system we identify all relevant costs and benefits in terms of ROI	44%	44%	7%	5%	0%	1.71
When making a business case for a new IT system we identify the benefits to patients	50%	45%	5%	1%	0%	1.57
When making a business case for a new IT system we identify the benefits to staff	38%	50%	10%	1%	0%	1.73
Our hospital has had some unsuccessful IT projects	21%	53%	17%	9%	1%	2.16
Realising benefits from new IT systems is important to our hospital	65%	34%	1%	0%	0%	1.36
I have attended training and development on "benefits realisation"	25%	22%	9%	36%	8%	2.79
My staff/colleagues within my organisational area of responsibility have had training on benefits realisation	12%	30%	26%	26%	7%	2.85
When new staff are appointed in my area of responsibility we train them in benefits realisation	4%	12%	31%	44%	10%	3.44
Our Trust/hospital is experienced in managing IT project successfully	19%	60%	17%	4%	1%	2.08
I have been trained in PRINCE2 project management	34%	23%	3%	29%	11%	2.59

Table 1: Assessment of how benefits realisation plays a role in successful delivery of new IT

In order to develop dynamic capabilities, organisations need to effectively control resources, and by doing so, be able when required, to deploy them flexibly. With few exceptions, 98% of the respondents agree that their Trust encourages the implementation of IT systems that support effective resource deployment. This resonates with participant experience around initiatives such as nurse rostering and bed management systems, systems noted for both challenge in implementation and realisation of a broader range of benefits (Wilson and Howcroft, 2005). Willingness to support this endorsement does however differ by role, at the

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5% level, Finance Directors being more positive compared with counterparts responsible for Nursing or IT.

Long established in the NHS is the application of investment appraisal and the necessity to provide an accompanying business case to support the acquisition and implementation of new IT systems. The necessity to incorporate the latter was not disputed here, although 4% of the senior managers pointed to examples where this has not happened within their Trust, with an example provided of business cases only required for expenditure above a certain financial value.

Most of the senior management from the responding Trusts had in some way or another been involved in the adoption of an IT system, although 5% cited no involvement in any new IT project. Crucial to successful systems adoption is the visibility of the senior team or dedicated project champions, thereby helping to underline the importance of the project within the Trust.

A traditional approach to supporting a business case with a comprehensive assessment of benefits and costs is "*return on investment*" (RoI), although more recent recognition has been given to the existence of the qualitative and perhaps non-tangible benefits that may exist. Challenges have been made to how such evaluations are undertaken, leading to a wider and sometimes more political way of making such an assessment, including the perspectives of those who have a direct link to the operation of the systems concerned. In the context of IT system implementation within a healthcare setting, there are arguably only a minority of such systems that have no effect on the patient experience or environment. In this respect, most participants in this study perceived that patient benefits were always identified, although with some potential for challenge within the sector, 11% of Nursing Directors believed that patient benefits were not articulated as part of the associated business cases within their Trust. Given that healthcare represents organisational core competence in this context, it would be assumed that care quality should predominate as a key benefit emanating from IT investments. From a staff perspective, most of the responding Trusts explicitly consider employee benefits. Figure 2 compares the perception of benefits realisation being afforded to patients and staff as the two key stakeholder groups by respondent role.

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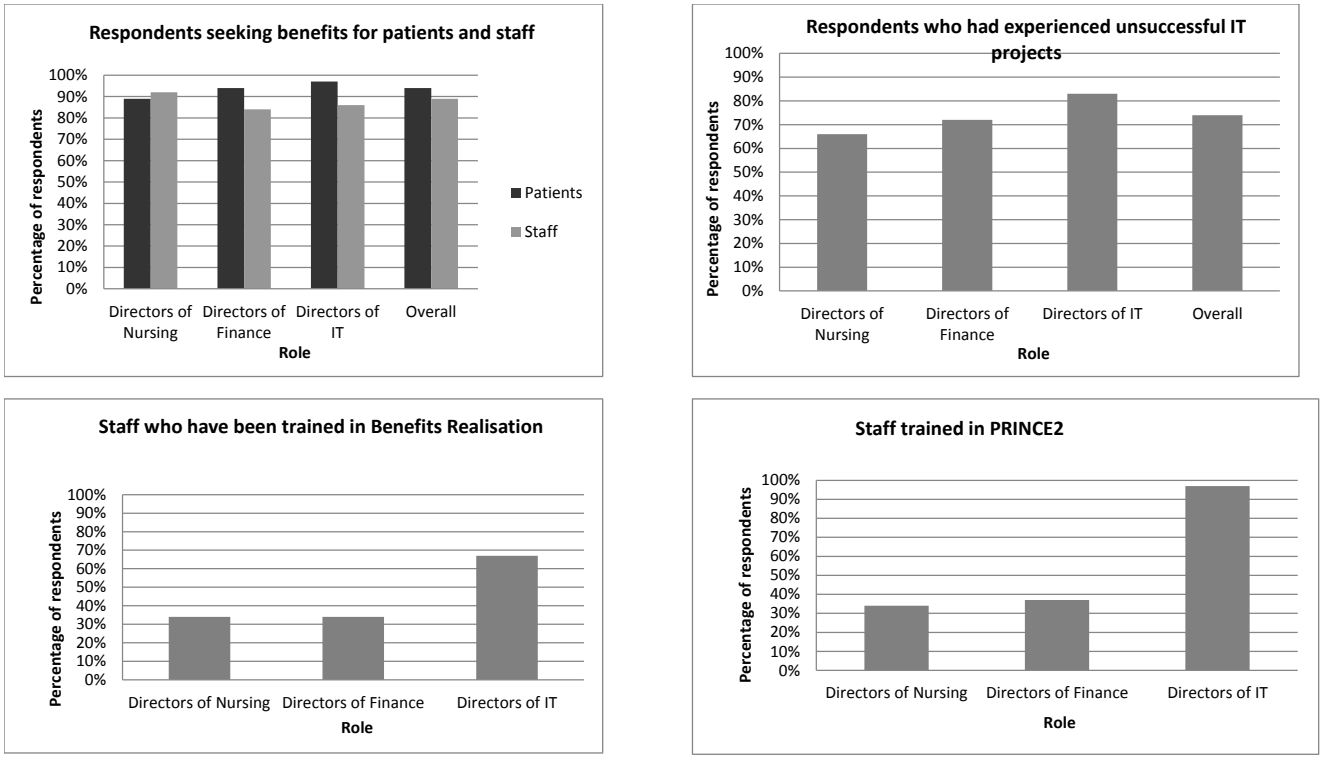

Figure 2 - Senior manager perspective of how benefits realisation supports successful IT delivery

It is perhaps understandable that most respondents have had experience of unsuccessful IT projects, this is clearly the case in relative terms for the IT Directors, as presented in Figure 2. What defines "*unsuccessful*" has not been explored here, although it could be reasonably argued that it has the potential for subjectivity and could well encompass the non-delivery of benefits to stakeholders perhaps specific to the respondent and their role. An outcome of such failure is learning opportunities afforded to the organisations, which may be achieved as part of any post-project review. Organisational learning and review will be considered in the next section of the study findings.

Almost all of the study respondents believe the realisation of benefits from newly invested IT systems has importance for their Trust. Despite this, an obvious mis-match in response becomes apparent with only 46% of these research participants indicating that they have been the recipients of "*benefits realisation*" training. Role disparities become noticeable here, with IT Directors being twice as likely to have received training in benefits realisation compared with Nursing and Financial counterparts, differences between the groups being significant at the 5% level, the relative differences are also presented in Figure 2. Given that the Directors may not directly realise the benefits of any new IT interventions, consideration was given to dedicated staff development around benefits realisation, with 42% agreed that their staff had been trained. Again differences by role area emerge, with less than 50% of IT staff being trained in this specific area, compared with only 34% of nursing staff and just over 40% from the finance provisions. Challenging questions to the Trust come out of these findings "*If most staff are not being trained in benefits realisation how do they know how to carry it out and measure the delivery of benefits*?" and *"Is benefits realisation a strategic priority for the Trusts*?" A more negative picture emerges through the consideration of new appointments, with only 15% of the study's participating senior managers suggesting these colleagues were

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afforded benefits realisation training. From the participating Directors, 57% had received training in PRINCE2, with significant differences being reported at the 1% level. IT Directors exhibit the greatest levels of training here, as indicated by Figure 1, with almost all of the IT respondents having been trained. This compares with a much smaller percentage of Directors of Nursing and Finance. Although criticism has been made of the deployment of PRINCE2 and its specific application within the UK public services, it represents *the* project management standard in the NHS. Despite the documented limitations, it affords its users with a framework for delivering IT projects, and as such, offers a level of support in the identification of associated benefits at an early stage in the project lifecycle.

Despite the lack of employee development at the various levels of the Trust hierarchies, 78% of the Directors contributing to this study indicated that their Trusts were successful in managing IT projects. Some differences of opinion across the three director groups have emerged, with significance at the 5% level. Directors of IT provide the greatest levels of endorsement here. In the case of the individual Trust where all three directors responded to the study, the Director of Finance completely disagreed that their hospital was successful in managing IT projects in contrast to the other two colleagues.

5.3. Staff development and training to support successful IT outcomes

This section gauges how Trust employees are trained and developed in the pursuit of successful IT project outcomes, with the percentage frequency distributions for each of the questions presented being displayed in Table 2.

Statement	Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)	Mean
Before staff become involved in IT projects they have some training and development by specialist trainers	16%	42%	18%	20%	5%	2.55
We do not train our staff in benefits realisation	11%	32%	25%	27%	6%	2.84
After IT systems go live we carry out benefits realisation reviews to ensure all benefits identified in the business case have been achieved	14%	46%	20%	19%	0%	2.43
When carrying out any change management within our hospital we always look to identify benefits	32%	59%	6%	3%	0%	1.79
Our hospital philosophy on benefits realisation applies to all change management projects not just IT projects	23%	46%	19%	10%	1%	2.19
Our hospital has undertaken continuous change through projects such as Lean, Six Sigma, TQM etc.	19%	47%	19%	12%	3%	2.31
Our IT and change projects are always aligned with the hospital business strategy	30%	51%	17%	1%	2%	1.94
No IT projects are funded unless they have been identified to deliver strategic benefits to the hospital	28%	51%	12%	8%	1%	2.04
This hospital recognises the delivery of IT projects is dependent on the skills of all stakeholders in those projects	26%	57%	12%	6%	0%	1.97
The hospital supports staff to undertake management training and development in order to achieve benefits from its change projects	14%	49%	24%	11%	2%	2.38
When IT or change management projects are undertaken we put metrics in place to measure our success in achieving the stated benefits of the projects	12%	53%	21%	14%	0%	2.37
Our hospital always adopts the same methodology or approach to the delivery of IT enabled change	12%	24%	31%	32%	0%	2.84
We always consult all relevant stakeholders in IT or change projects	17%	45%	21%	16%	0%	2.35
We consult patient stakeholders where new IT may affect their interaction with the Trust	11%	35%	32%	21%	0%	2.64
After an IT enabled change project we have post-project reviews with stakeholders to embed the learning from the project	15%	33%	25%	27%	1%	2.67
When putting in a new IT system the hospital management team looks for incremental change	8%	46%	37%	8%	1%	2.50
Benefits realisation continues to be monitored up to one year after an IT project is completed	9%	25%	31%	30%	5%	2.95

Table 2: Staff development and training to support successful IT outcomes

In assessing pre-training of staff in benefits realisation prior to IT project involvement, clear differences exist between the relatively low endorsement from the Directors of Finance and their Nursing and IT counterparts, significant at the 1% level. This is perhaps unexpected

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given the assurances that business cases are scrutinised prior to project sign-off, with training and development representing key cost components for projects of this nature.

Across the participant group, 43% suggested that Trust employees are not trained in benefits realisation, which further raises the question "*To what extent are benefits identified, managed and ultimately achieved over a project's lifetime?*" Despite this lack of specific and formal development, 61% of the respondents concur that their Trusts conduct benefits realisation reviews, although responses differed by role, with only 44% of the Finance Directors supporting this. This difference is particularly interesting given the reporting lines established in many of these Trusts, where IT employees report through to the Director of Finance.

Existing academic research suggests that more progressive organisations not only have formal strategies for realising benefits from technology change projects , but they also encompass benefits realisation within their more generic change projects (Ward and Daniels, 2006). In this study, 92% of the senior managers have supported the idea that within their Trust, benefits are identified in general change projects. This overwhelming endorsement is perhaps surprising and at odds in comparison with various findings reported elsewhere in this study. Across the respondents, 69% stated that the benefits realisation philosophy applied project-wide to the change environment within their Trust, although whilst Nursing and Finance Directors have resonance here, Directors of IT do not exhibit the same level of conviction, with only 54% of this sub-group in agreement.

In terms of business strategy alignment, 80% of the respondents agreed that their IT projects are always aligned, although there is marginally less endorsement from the IT Directors, perhaps because of their closer working relationship with the various change implementations that have been put in place. The link between funding for IT projects and delivery of strategic benefits provides a similar response profile, both overall and by respondent discipline. Here, 82% gave agreement, although the differences between the three Director groups was significant at the 5% level, IT Directors being more likely to depart from supporting this, with Finance Directors offering the greatest levels of statement support.

In identifying levels of institutional support for training to achieve benefits from change projects, 63% agreed their Trust supports staff, with some relatively minor difference by manager role, as shown in Figure 2. Further to this, 64% of the respondents indicate that their Trust has implemented formal metrics to assess success in the various projects delivering their pre-defined benefits. There appears to be divergence in the methodologies adopted in achieving IT delivery, with a relatively small proportion of respondents, 36%, agreeing their Trust consistently adopts the same methodology project by project. There is, as presented in Figure 3, relatively greater agreement amongst the Directors of Nursing, although these differences overall are not statistically significant.

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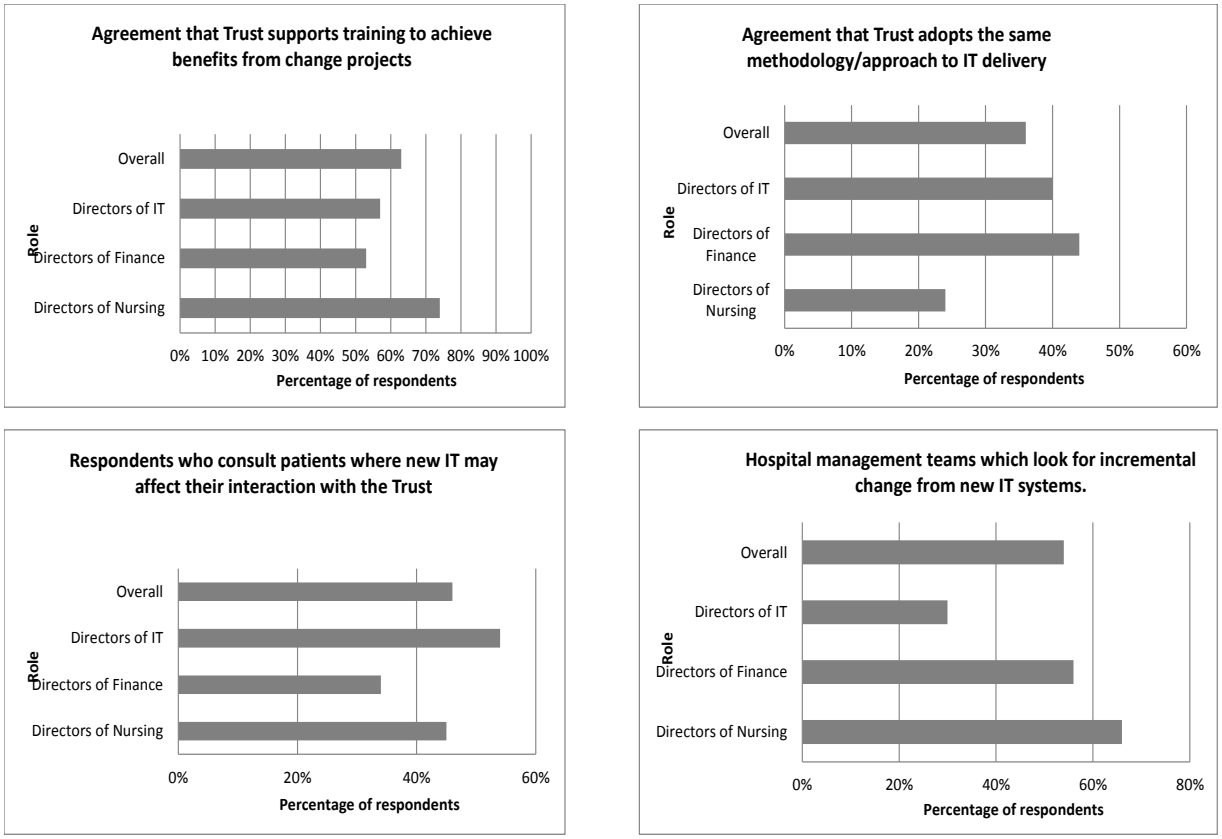

Figure 3 – Supporting staff development and training

For stakeholder consultation, senior employees participating here agree that Trusts undertake necessary dialogue with regard to the various change or IT projects being put in place. It would appear, however, levels of patient consultation are lower, with only 46% agreeing that Trusts consulted in relation to new IT initiatives. There are differences in the relative levels of senior management perception with respect to this consultation, as exhibited in Figure 2, but these are not statistically significant.

In terms of change within the Trusts, 54% of the participants considered that senior management sought an incremental approach to change, with no differences in support for this position emerging between the Directors of Nursing, Finance and IT groups, despite the relative negativity shown by the latter in Figure 3.

In consideration of organisational learning, only 47% of respondents stated they hold post-project stakeholders reviews, whilst the specific assessment of learning into the longer term is perceived by a smaller proportion of these senior managers, with 35% indicating that benefits realisation is monitored up to one year post-project completion. The proportions both agreeing and disagreeing with this position is found to be reasonably similar in number.

5.4. Trust philosophy on staff development in relation to IT and change projects

Eight measures were considered here, the percentage frequency distributions displayed in Table 3.

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Statement	Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)	Mean
The hospital values its staff and is committed to the development of organisational learning	51%	39%	7%	3%	0%	1.63
Staff within my area of responsibility are able to realise benefits from IT projects through the use of metrics to measure success	18%	51%	18%	14%	0%	2.28
The hospital empowers staff in my area of responsibility to develop their own innovative solutions to change management	18%	49%	22%	10%	1%	2.28
The hospital is developing means to manage organisational knowledge	15%	44%	22%	18%	1%	2.46
The hospital has benefits realisation leaders/specialists who help deliver the benefits of new IT systems	12%	24%	26%	30%	8%	2.96
The senior management of the hospital are always engaged in the benefits realisation efforts in the Trust	16%	44%	22%	15%	4%	2.47
Benefits realisation is a strategic priority in this Trust	19%	47%	23%	9%	2%	2.29

Table 3: Trust philosophy on staff development in relation to IT and change projects

Encouragingly, 91% of the study participants consider that their Trust values their employees and has a commitment to organisational learning. Less positive, 68% indicated employees who are directly or indirectly managed by them have the capability to realise benefits from IT projects by means of appropriate metrics. There are significant differences in this perception by participant role, at the 5% significance level. There is a greater level of belief that this is true amongst the IT Directors, whilst the opposite is the case for those with financial responsibilities. Here, only 52% agreed with this statement, which is unexpected given their control and oversight of the return on investment of such IT system implementation, this disparity being clear from Figure 4. This may be accounted for by the fact that IT Directors may be closer to staff on the ground who actually undertake the work. In many organisations IT Directors report to the Finance Directors.

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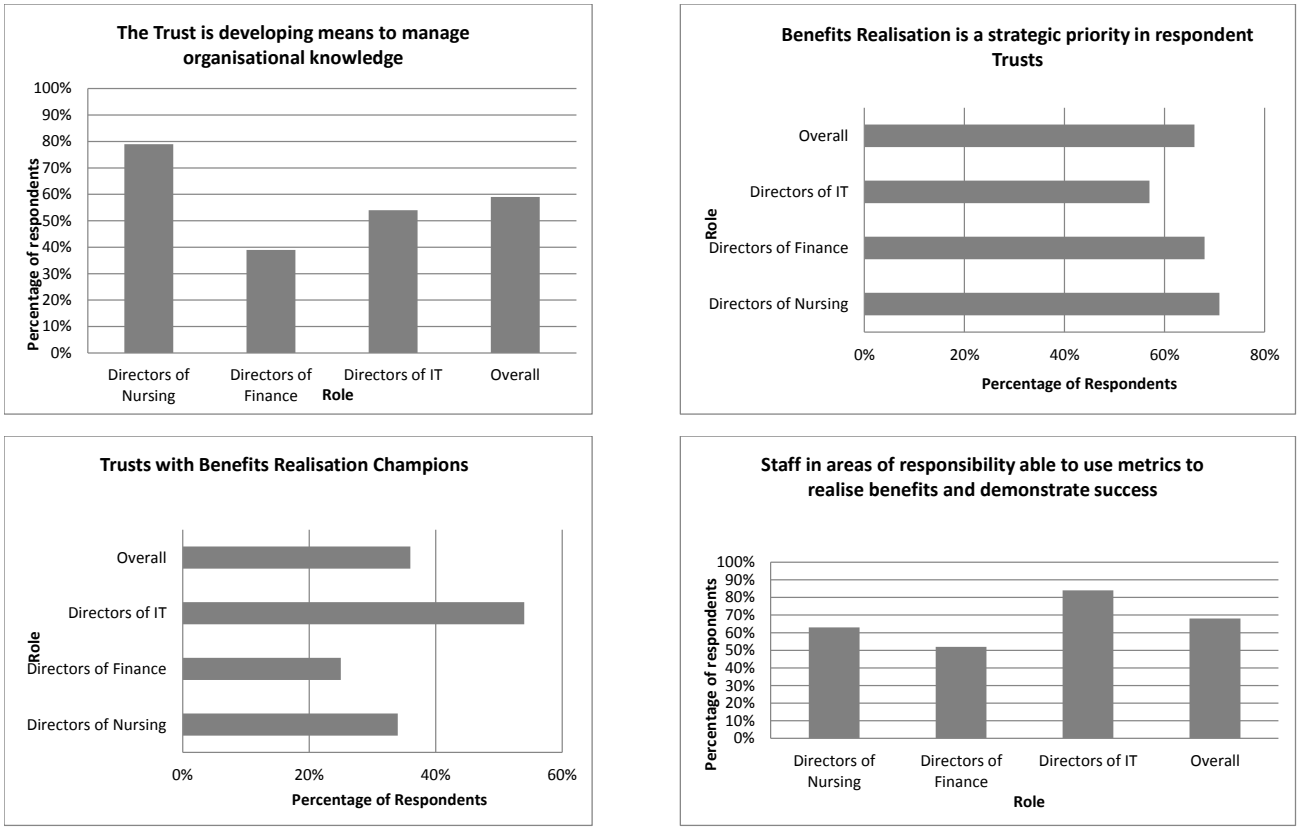

Figure 4 – Trust philosophy on staff development relating to IT change

In the assessment of employee empowerment, 67% of the survey participants believed that their Trust empowers staff to develop their own innovative solutions to change management, with similar levels of endorsement exhibited by the three categories of Director.

Less of an endorsement is given to the Trusts by these senior managers that mechanisms are in place to manage organisational knowledge, with 59% responding positively to the specific statement provided on the questionnaire. Differences also exist between the three Director groups, at the 1% level of significance. The greatest accord can be found amongst the Nursing Directors, followed by the IT Directors, with the least support provided by Directors of Finance, as shown within Figure 4.

Only 36% of these participants believe their hospital has benefits realisation leaders or specialists in place, representing an event greater challenge across the sector and one that displays some differences across the three discipline areas considered, as presented in Figure 3. There is a relatively negative perception amongst the Directors of Finance.

In considering the extent to which these evaluations are supported by senior management, 60% of the respondents consider senior management to be continually engaged in benefits realisation, whilst going one step further through assessing the level of acceptance that benefits realisation represents a Trust strategic priority, a positive response of 66% from the participating Directors, the respective levels of agreement presented in Figure 3. Whilst no significant differences exist, there is relatively less support for this belief amongst the Directors of IT.

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Discussion and conclusion

It is clear from this survey that executive managers within English NHS hospitals are aware of the concept of benefits realisation (BR) and most are committed to using it as part of their strategy to deliver successful IT projects. Nevertheless for the most part hospitals have a long way to go to embed a BR approach into their organisational and strategic routines (Eisenhardt and Martin (2000). Where hospitals identify benefits early in IT projects they tend to be captured within the business case and used to support the proposed innovation and this is congruent with the research undertaken by Ward and colleagues (Ward and Daniel, 2006; Ward et al., 1996). However the gap in the BR process is the need to embed it within and across the organisation. For hospitals to develop their BR capability they must be prepared to move beyond the business case and develop their staff, including clinicians, in a process that is more than just IT and includes change management.

Remenyi and Sherwood- Smith (1998) argue for active BR where staff are not only engaged in identifying IT benefits but also know how to ensure that they are the outcomes of projects. This means developing BR programmes and monitoring progress through measurement. Ward and Daniel (2006) have provided methodological guidance on how this process may be achieved and have even given NHS examples of where it has worked. Nevertheless Ashurst and Hodges (2010) recognise that BR can be complex and is not just about training individuals.

The framework of maturity levels for key BR factors (Ashurst and Hodges, 2010) in Appendix 2 illustrates how BR as a mature dynamic capability is yet to become a reality within the NHS respondent hospitals. As yet few staff are trained in BR outside the IT department and where development does take place it is project specific. Measuring BR success is still relatively unsophisticated with little understanding of metrics and how to address qualitative benefits. Even engagement with stakeholders in the BR process is not well understood particularly where patients are involved. Ashurst and Hodges (2010) framework has not been used previously to explore BR and they recognise that it requires further research. This study has done this by interpreting it to enable the survey of English hospitals. From our perspective it has provided a snapshot of the state of BR and has allowed us to establish that BR still requires some work within hospitals if it is to be recognised as a dynamic capability.

The results of this survey highlight the importance of benefits realisation of ICT and organisational change to all of the participant acute hospitals in England. As part of this study participants were asked if they would be prepared to be interviewed about benefits realisation in their trust. We are in the process of carrying out these interviews and establishing how Trusts do involve stakeholders such as patients in their ICT projects and how they ensure that they ultimately benefit from implementation of technology. We are also interested in establishing how staff members are developed to realise benefits as this is of interest to hospitals that have just started on this journey following the demise of NPfIT. Our intention will then be to disseminate the information to the participating Trusts in order to support their practice.

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Appendix 1

Benefits Realisation Questionnaire

Section 1

In this section we are interested in the type of IT systems the Trust/hospital has to manage its patients and staff resources and whether benefits realisation plays a role in the successful delivery of new IT.

1. This Trust has the following systems [Please put a X where applicable]:

   A Patient Administration System (PAS) [ ]

   An order communications system [ ]

   A nurse rostering system [ ]

   A bed management system [ ]

   Don't know [ ]

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
2. Our Trust/ hospital is keen to adopt IT systems to support the management of resources					
3. New IT systems cannot be purchased in our hospital without making a business case.					
4. I have been involved in the purchase/ adoption /implementation of a new IT system					
5. When a business case is made for a new IT system we identify all relevant costs and benefits.					
6. Realising benefits from new IT systems is important to our hospital.					
7. I have attended training and development on 'benefits realisation'					
8. My staff/ colleagues within my organisational area of responsibility have had training on benefits realisation.					
9. When new staff are appointed in my area of responsibility we train them in benefits realisation.					
10. Our Trust/hospital is experienced in managing IT projects successfully.					

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11. I have been trained in PRINCE2 project management.					

Section 2

This section seeks to understand how staff in the Trust/ hospital are trained and developed to achieve successful IT projects outcomes.

	Strongly agree	**Agree**	**Neither agree or disagree**	**Disagree**	**Strongly disagree**
12. Before staff become involved in IT projects they have some training and development delivered by specialist trainers (e.g. HR, IT or change management trainers)					
13. We do not train our staff in benefits realisation.					
14. After IT systems go live we carry out benefits realisation reviews to ensure all benefits identified in the business case have been achieved.					
15. When carrying out any change management within our Trust we always look to identify benefits.					
16. Our Trust philosophy on benefits realisation applies to all change management projects not just IT projects.					
17. Our Trust has undertaken continuous change through projects such as Lean etc					
18. Our IT and change projects are always aligned with the Trust business strategy.					
19. No IT projects are funded unless they have been identified to deliver strategic benefits to the Trust.					
20. This trust recognises that successful delivery of IT projects is dependent on the skills of all stakeholders in those projects					
21. This Trust supports staff to undertake management training and development in order to achieve					

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benefits from its change projects.					
22. When IT or change management projects are undertaken we put metrics in place to measure our success in achieving the stated benefits of the projects.					
23. Our Trust always adopts the same methodology or approach to the delivery of IT enabled change.					
24. We always consult all stakeholders in IT or change projects.					
25. We consult patient stakeholders where new IT may affect their interaction with the Trust.					
26. After an IT enabled change project we have post-project reviews with stakeholders to embed the learning from the project.					
27. When putting in a new IT system the Trust management team looks for incremental change.					
28. Benefits realisation continues to be monitored up to one year after an IT project is completed.					

Section Three

This section explores the Trust/ hospital philosophy on staff development in relation to IT and change projects.

	Strongly agree	**Agree**	**Neither agree or disagree**	**Disagree**	**Strongly disagree**
29. The Trust values its staff and is committed to the development of organisational learning					
30. Staff in my area of responsibility are able to realise benefits from IT projects through the use of metrics to measure success.					
31. The Trust empowers staff in my area of responsibility to develop innovative solutions to change management.					

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32. The Trust is developing means to manage organisational knowledge.					
33. The Trust has benefits realisation leaders/ specialists who help deliver benefits of new IT systems.					
34. The senior management of the Trust are always engaged in the benefits realisation efforts in the Trust.					
35. Benefits realisation is a strategic priority in this Trust.					

Thank you for taking the time to complete the questionnaire. We will be providing a report on the findings of this national survey and would like to follow up the survey at a later date.

If you would like a copy of the report please indicate YES/ NO

If you would be prepared to be interviewed in relation to the study at a later date: YES/ NO

Contact details to send report:

Name: .....

Email address: .....

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Appendix 2

Factor	Level 1: Basic	Level 2: Improving	Level 3: Enhanced	Level 4: Advanced
Measuring success	Including all relevant costs/ benefits in the business case.	Carrying out benefits realisation reviews.	Focus on 'measuring the right things' as a driver of change.	Measures of the benefits realisation capability.
Broader view of change	IT solution delivery	Benefits realisation from business change	Designing the approach to change for each initiative.	Creating a more flexible approach to governance, such as enabling local innovation.
Sustaining benefits realisation	Ongoing provision of education to maintain expertise through staff turnover.	Ongoing emphasis on improvement and incremental change.	Designing projects with greater emphasis on preparing for post-project learning.	New approaches for knowledge work scenarios.
Managing the Benefits realisation portfolio	Establishing control of the IT project portfolio.	Strategic alignment of a cross organisation portfolio of investments in change	Adapting the approach to projects based on the portfolio.	Emphasizing business innovation and learning.
Capacity for benefits realisation	Establishing a baseline of effective IT service management and a common project framework	Focus on the skills of individuals as a driver of success.	Establishing a more agile approach to projects including incremental delivery.	Developing leaders of benefits realisation.
Competence of the individuals	Localised/ individual development of skills (PRINCE2, MSP)	Broad education programs- with an emphasis on benefits realisation.	Moving from education to a broader emphasis on development and organisational learning.	Top management engagement to address this as a strategic priority.

Maturity levels for key BR factors (Ashurst and Hodges, 2010 p233) adapted for the survey instrument

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